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SAFETY AND FIRST AID IN BASIC SCHOOLS: THE ROLE OF TEACHER AS FIRST AIDER

BY

Adamu Abubakar Getso RN

Department of Human Kinetics and Health Education, Bayero University, Kano

aagetso.phe@buk.edu.ng

Abstract

Safety is the act of being free from danger and prevention of accident and property damage which may result from any unforeseen circumstances. On the other hand first aid is the immediate care given to any person who sustained either a minor or serious illness or injury in order to save life, prevent permanent impairment and to promote recovery. In this study, introduction; objectives of safety and first aid in basic schools; basics for safety and first aid; safety measures in basic schools; first aid in basic schools; importance of safety and first aid in basic schools; common emergency conditions in basic schools; requirements of first aid kit; the role of teacher in safety and first aid were discussed. It was concluded that all safety measures should be observed and all first aid requirements are provided in basic schools in order to maintain conducive atmosphere for effective teaching and learning processes. Provision of safety and first aid care by teachers also reduces unnecessary expenditure and cost healthcare services in basic schools. and recommended among others that school health services need to be fully equipped by providing first aid kits in schools along with separate sick bays to handle medical emergencies.

Introduction

Safety is a state of being "safe," the condition of being protected against physical, social, spiritual, financial, political, emotional, occupational, psychological, educational or other types of consequences of failure, damage, error, accident, harm or any other event which could be considered non-desirable (First Aid Manual, 2009). According to Al-Samghan, Al-Shahrani and Al-shahrani (2015), **first aid** is the first and immediate assistance given to any person suffering from either a minor or serious illness or injury, with care provided to preserve life, prevent the condition from worsening, or to promote recovery. It includes initial intervention in a serious condition prior to professional medical help being available, such as performing Cardiopulmonary Resuscitation (CPR) while waiting for an ambulance, as well as the complete treatment of minor conditions, such as applying a plaster to a cut. First aid is generally performed by someone with basic medical training. Mental health first aid is an extension of the concept of first aid to cover mental illnesses, while psychological first aid is used as early treatment of people at risk for developing Post Traumatic Syndrome (PTSD) (Prasla & Prasla, 2011).

First aid frequently needed in schools to manage bleeding, respiratory insufficiency, fainting, convulsions, allergic reactions, burns, poisonings, head trauma, upper respiratory tract infections, skin infections, diarrhea, vomiting, stomach ache, buckling, and fracture and dislocation (Erkan & Goz 2006). For example, chances of living for a student who spends the majority of his time in school and has cardiac arrest in school could be increased through a right heart massage done by the closest person or teacher (Gursoy & Cilingir, 2008).

The researcher observed that the rate at which accidents is happing in basic schools is always increasing leading to mild and severe injuries among pupils. Generally, provision of first aid facilities was also observed to be inadequate, therefore, majority of accident cases were referred to hospitals instead of being treated at the schools which worsen the conditions before arriving hospital. Also, teachers were observed to be inadequately trained on first aid, where in ideal situation, for a school population of 250, a maximum of three (3) trained first aiders should be available.

Muhammad, Khalid, Nigah-e-Mumtaz, Assad and Noreen (2018) conducted a study on first aid facilities in schools in Jakarta, Indonesia. The findings revealed that out of 209 teachers, 72.7% were from private schools. Stomachache was the most common medical incident (82.29%) requiring first-aid care in schools. First aid box was available in all schools but its contents were not satisfactory. Sick bay was not found in any school. 68.42% of teachers were not trained in first-aid management because of lack of opportunity, however 56% were willing to enroll in any first aid training and majority (91.38%) considered it essential for their professional life.

Objectives of Safety and First Aid in Basic Schools

Younis and El-Abassy (2015) stated that, the primary goal of first aid is to prevent death or serious injury from worsening. The key aims of first aid can be summarized with the acronym of the three Ps:

To Preserve life

The overriding aim of all medical care which includes first aid is to save lives and minimize the threat of death (Vervoort, Goubert, Eccleston, Bijttebier & Crombez, 2006).

To Prevent further harm

According to Olympia, Wan and Avner (2005) prevention of further harm also sometimes called **prevent the condition from worsening**, or **danger of further injury**, this covers both external factors, such as moving a patient away from any cause of harm, and applying first aid techniques to prevent worsening of the condition, such as applying pressure to stop a bleed becoming dangerous .

To Promote recovery

First aid also involves trying to start the recovery process at the scene of illness or injury and in some cases might involve completing a treatment, such as in the case of applying a plaster to a small wound (Olympia, Wan & Avner, 2005).

Kumar, Kulkarni, Srinivas, Prakash, Hugara and Ashok (2013) opined that, it is important to note that first aid is not medical treatment and cannot be compared with what a trained medical professional provides. First aid involves making common sense decisions in best interest of an injured person. The stages involved in keeping a badly hurt pupil/student alive is "ABCs" (Air way, Breathing and Circulation).

Basics for Safety and First Aid

According to Nessel and Edward (2012) the first step in any emergency is the recognition of the problem and providing help. When in doubt or when someone is seriously injured or ill, you should always activate the emergency response system by calling 911. If you're not sure how serious the situation is, the 911 operator will ask you a series of questions to determine the seriousness of it.

Remain on the line until additional help arrives, or until the 911 operator tells you to hang up. Emergency system dispatchers can guide you through the steps of performing Cardiopulmonary Resuscitation (CPR), using an Automatic External Defibrillator (AED), or delivering basic care until additional help arrives (Baser, Coban, Tasci, Sungur & Bayat, 2007).

Longphre, Petar, Richard, Richard & John (2007) whether you are at home, work, or school, know where the first aid kit and the AED are kept and be familiar with their contents. Know how to activate the emergency response system. Be aware of any policies in the workplace regarding medical emergencies. After determining the problem, the next step in providing help is to determine the unresponsiveness of the injured or ill person. The best way to determine this is to tap the person and talk loudly to them: “Are you okay?” After determining unresponsiveness, yell for help. Look for any medical identification, such as a necklace or a bracelet. This may provide a valuable clue to the cause of the situation (Ali, Abu-Elseoud, Heybah& Mohamed, 2010).

Safety Measures in Basic Schools

Gupta and Gupta (2000) itemized the following as the safety measures which should be observed in schools:

a. Signs of danger should be placed on dangerous areas within the compound (skull & bones) especially on transformers, barb and naked wires etc.

b. Embarking on general environmental sanitations from time to time to prevent accident/ diseases
c. Toilets should be kept clean always
d. Buildings have to be with all specifications especially space etc. As in kindergarten schools with no over-crowding.
e. Furniture should also be conformed to the age and ability of the children.
f. Health educating the children generally on all related events and circumstances, found within the school that are liable to cause accidents.
g. School health nurse should be around all the time, especially during physical education (PE).
h. Keep first aid kit should be available with all required items ready.
i. Play grounds should be free from all hazards.
j. All foods should be healthy prepared.
k. Food vendors should be examined and inspected regularly.

First Aid in Basic Schools

It is beyond doubt that knowledge of first aid promotes a safer and healthier environment. Having staff and students who are well equipped with first aid skills contribute to enhancing the safety of the schools. Many students experience accidents while they are at schools. The accidents might lead to simple injuries, serious wounds or fractures. However, the victim can be given initial assistance until the doctor arrives. It is important to have trained staff and students who can utilize their skills and take quick action to treat the affected person. They can apply the right procedures to prevent more damage (*First Aid Manual,* 2009).

Guidelines and Guidance on the ABCDE approach by Resuscitation Council (UK)(2005)opined that, as first aid offers a range of benefits, therefore, it is a must for the teachers and students to get proper first aid training so that they can contribute to preserving lives. Without an initial medical assistance, a mild injury might turn into a serious one. Moreover, serious injuries when not treated on time can be fatal. To ensure the safety of all the staff members and students, it is important to have first aid in the schools. It is vital to make everyone aware of the basic methods they should apply after an accident occurs.

Importance of safety and first aid in schools

Eisenburger and Safar (1999) described the importance of safety and first aid as follows:

Promotes the sense of safety

Teachers and students with good knowledge of the first aid are likely to be more alert and active. They make sure they are not vulnerable to any accident or injuries. First aid

promotes the sense of safety. It makes them capable of managing incidents and assessing casualties. The more they are aware of the accidents, illness and treatments, the more they become conscious.

Quick treatment

First aid is the initial treatment given to a victim. Some injuries do not require professional assistance. They can be treated with simple methods such as applying an ice pack. First aiders can help the affected person feel better and relieve pain by performing simple procedures.

Prevents victim's condition from becoming worse

Although first aid is a temporary treatment, it still plays a great role in preventing the situation from getting serious or worse. Well-trained first aiders apply the right methods to keep the situation under control. They put every effort to help victim cope with the illness or pain until professional help arrives.

Helps preserve life

People equipped with first aid skills can handle emergencies in an efficient manner. Their quick response and right methods of treatment can help save lives. A trained person is more composed and confident in critical situations. He/she knows the best possible ways to help the victims regain their consciousness.

Makes people feel secure

People who get first aid training to learn the treatment methods are likely to feel secure. They are aware of the fact that they can treat themselves easily in case an accident occurs. Moreover, they are also trusted by their friends or loved ones. Having a well-trained first aider around help them relax and stay calm in the event of an emergency.

Common Emergency Conditions in Basic Schools

Goel and Singh (2008) described Bleeding, Burns, Heatstroke, Unresponsiveness or unconsciousness, Head injuries, Bone injuries, Muscle injuries, Joint injuries, Choking, Fainting, Chest pains, Asthma and Allergic reactions as the most common conditions among school children.

Requirements of First Aid Kit

The following items should be available in first aid kit:

a. CPR Face Mask/Mouth barrier
b. Thermal Blanket
c. Burn Gel

d. Cardboard Splint
e. Cold Pack
f. Trauma Dressings
g. Triangular Bandages
h. Sterile Water
i. Gauze Rolls
j. First Aid Tape
k. Trauma Shears/Scissors
l. Antiseptic Wipes
m. Vinyl Gloves
n. Antimicrobial Wipes
o. Band-Aids
(Gupta & Gupta, 2000)

The role of the teacher in Safety and First Aid

According to Gagliardi, Neighbors, Spears, Byrd and Snarr (1994), first aid is the help given to someone who is injured or ill to keep them safe and to cause no further harm. The role of a teacher is to give pupil/student this help.

1. Assess the situation quickly and calmly.

i. **Safety:** check whether you or the pupil/student is in any danger. Is it safe to approach them? (Are you wearing protective equipment?)
ii. **Scene:** find out what caused the accident or situation and how many casualties there are.
iii. **Situation:** find out what's happened, how many people are involved and how old they are.

2. Protect yourself and the pupil/student from any danger.

i. Always protect yourself first, never put yourself at risk.
ii. Only move them if leaving them would cause them more harm.
iii. If you can't make an area safe, call 911 for emergency help.

3. Prevent infection between you and them.

i. Wash your hands with soap and water or rub your hands with alcohol gel.
ii. Wear disposable, latex free gloves. Do not touch an open wound without gloves on. If you do not have any gloves, you could use clean plastic bags or ask the casualty to dress the wound if they are able.
iii. Do not breathe, cough or sneeze over a wound or casualty.

4. Comfort and reassure.

i. Stay calm and take charge of the situation.

ii. Introduce yourself to them to help gain their trust.

iii. Explain the situation and anything you're going to do before you do it.

iv. Treat the casualty with dignity and respect at all times.

5. Assess the casualty and give first aid treatment.

i. If there's more than one casualty make sure you help those with life-threatening conditions first.

ii. Use the primary survey to deal with any life-threatening conditions. When these have been dealt with successfully move on to the secondary survey.

6. Arrange for help if needed.

i. Call 911 for an ambulance if you think it's serious.

A first aider's overall priority should be to preserve life. Other aims of first aid include preventing the worsening of the patient's condition and to promote recovery.

In the opinion of Devashish, Gaurav and Bharat (2013) the teacher as first aider is to provide immediate, potentially lifesaving, medical care, before the arrival of further medical help. This could include performing procedures such as:

ii. Placing an unconscious casualty on the recovery position.

iii. Performing Cardiopulmonary Resuscitation (CPR)

iv. Using an Automated External Defibrillator (AED)

v. Stopping bleeding using pressure and elevation

vi. Keeping a fractured limb still and supported

Conclusion

Safety measures and first aid treatment are very essential in basic schools where there are children who are at their tend stage of life. In this situation, all safety measures should be observed and all first aid requirements are provided in basic schools in order to maintain conducive atmosphere for effective teaching and learning processes. Provision of safety and first aid care by teachers also reduces unnecessary expenditure and cost healthcare services in basic schools.

Recommendations

1. Safety education and first aid training should be incorporated into the curriculum of basic education, so that they are able to help themselves and others in medical emergencies.

2. School health services need to be fully equipped by providing first aid kits in schools with separate sick bays to handle medical emergencies.
3. Schools management should design programs to train the school teachers on periodic appraisal of pupils.
4. Measures should be taken by the school management to make schools safer environment for children.

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